

AMENDMENTS TO THE CLAIMS

1. (original) A *B. oleracea* plant resistant to clubroot disease, wherein the resistance to clubroot is monogenic and dominant.
2. (original) The plant according to claim 1, wherein said *B. oleracea* plant is rated at level 2 or less in a test for the disease having a 1-9 scale or at a level 1 or less in a test for the disease having a 0-5 scale.
3. (original) The plant according to claim 1, wherein said *B. oleracea* plant is rated at level 1 in a test for the disease having a 1-9 scale or at a level 0 in a test for the disease having a 0-5 scale.
4. (original) The plant according to claim 1, wherein said *B. oleracea* plant is broccoli, white cabbage, cauliflower, Brussels sprouts, Borecole, Savoy, or red cabbage.
5. (original) The plant according to claim 1, wherein said resistance is linked to a molecular marker obtainable by PCR amplification.
6. (original) The plant according to claim 1, wherein said resistance is linked to a molecular marker obtainable by PCR amplification using primer O20 (SEQ ID NO:1) or primer Y13 (SEQ ID NO:2).
7. (original) The plant according to claim 5, wherein said resistance is within 10 cM of said molecular marker.
8. (original) The plant according to claim 5, wherein said resistance is within 6 cM of said molecular marker.
9. (original) The plant according to claim 1, wherein said resistance is obtainable from a clubroot resistant *B. rapa* plant.

10. (original) The plant according to claim 1, wherein said resistance is obtainable from Chinese cabbage F1 hybrid Parkin.

11. (original) A *B. oleracea* plant comprising a locus conferring resistance to clubroot disease, wherein said resistance is monogenic and dominant.

Claims 12-16. (cancelled)

17. (currently amended) The plant according to claim 1 ~~any one of claims 1 to 16~~, wherein said *B. oleracea* plant is homozygous for said resistance.

18. (currently amended) The plant according to claim 1 ~~any one of claims 1 to 16~~, wherein said *B. oleracea* plant is heterozygous for said resistance.

19. (currently amended) The plant according to claim 1 ~~any one of claims 1 to 16~~, wherein said *B. oleracea* plant is an inbred or a dihaploid.

20. (currently amended) The plant according to claim 1 ~~any one of claims 1 to 16~~, wherein said *B. oleracea* plant is a hybrid.

21. (currently amended) The plant according to claim 19 ~~[[or 20]]~~, wherein said *B. oleracea* plant is cytoplasmic male sterile.

22. (currently amended) Seed of a plant according to claim 1 ~~any one of claims 1 to 21~~.

23. (currently amended) Fruit or part of a plant according to claim 1 ~~any one of claims 1 to 21~~.

24. (currently amended) Part of a plant according to claim 1 ~~any one of claims 1 to 21~~, wherein said part is pollen, ovule or embryo.

Claims 25-26. (cancelled)

27. (original) A method for producing a *B. oleracea* plant comprising a monogenic and dominant resistance to clubroot comprising the steps of:

- a) obtaining a *B. rapa* plant resistant to clubroot;
- b) crossing said *B. rapa* plant with a *B. oleracea* plant,
- c) rescuing embryos resulting from the cross of step b);
- d) regenerating a plant from an embryo of step c);
- e) selecting a plant of step d) that is resistant to clubroot;
- f) back-crossing a plant resulting from step e) with a *B. oleracea* plant.

28. (original) The method according to claim 27, further comprising introgressing the resistance into an elite *B. oleracea* inbred.

29. (original) The method according to claim 28, further comprising crossing said inbred to another *B. oleracea* inbred to produce a hybrid.

30. (currently amended) A *B. oleracea* plant obtainable by the method of claim 27 ~~any one of claims 27 to 29~~.

31. (original) A method for transferring a monogenic and dominant resistance to clubroot to a *B. oleracea* plant susceptible or less resistant to the disease comprising the steps of:

- a) obtaining a *B. oleracea* plant comprising a monogenic and dominant resistance to clubroot;
- b) crossing said *B. oleracea* plant of step a) with a *B. oleracea* plant susceptible or less resistant to clubroot;
- c) selecting a plant from the cross of step b) that is resistant to clubroot.

32. (original) The method according to claim 31, further comprising backcrossing said resistance into said *B. oleracea* plant susceptible or less resistant to clubroot.

33. (currently amended) A DNA fragment amplified from a Brassica genome, wherein said DNA fragment is approximately 400 bp long and comprises SEQ ID NO:1 or wherein said DNA fragment is approximately 640 bp long and comprises SEQ ID NO:2.

34. (cancelled)

35. (currently amended) [[A]] The DNA fragment according to claim 33 [[or 34]], wherein said DNA fragment is indicative of the presence of a dominant and monogenic resistance to clubroot in a Brassica plant.

Claims 36–40. (cancelled)

41. (currently amended) A kit for detecting a monogenic and dominant resistance to clubroot in a *B. oleracea* plant comprising an oligonucleotide ~~of~~ set forth in SEQ ID NO:1 or SEQ ID NO:2.

42. (original) A method for transferring a monogenic and dominant resistance to clubroot to a *B. oleracea* plant susceptible or less resistant to the disease comprising the steps of:

- a) obtaining a *B. oleracea* plant comprising a monogenic and dominant resistance to clubroot;
- b) crossing said *B. oleracea* plant of step a) with a *B. oleracea* plant susceptible or less resistant to clubroot;
- c) selecting a plant comprising a DNA fragment obtainable by PCR amplification using primer O20 (SEQ ID NO:1) or primer Y13 (SEQ ID NO:2); wherein said plant of step c) is resistant to clubroot.

43. (original) The method according to claim 42, further comprising backcrossing said resistance into said *B. oleracea* plant susceptible or less resistant to clubroot.

Claims 44-45. (cancelled)

46. (new) Seed of a plant according to claim 11.

47. (new) Fruit or part of a plant according to claim 11.

48. (new) The plant according to claim 11, further comprising a nucleic acid sequence, which can be amplified by PCR using primer O20 (SEQ ID NO:1) or primer Y13 (SEQ ID NO:2).

49. (new) The plant according to claim 48, wherein a DNA fragment of approximately 400 bp is amplified using primer O20 (SEQ ID NO:1).

50. (new) The plant according to claim 48, wherein a DNA fragment of approximately 640 bp is amplified using primer Y13 (SEQ ID NO:2).

51. (new) Seed of a plant according to claim 48.

52. (new) Fruit or part of a plant according to claim 48.